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**UNO TAKAHIRO
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IDA TAKAYUKI**(54) **ARC WELDING TORCH AND ITS ARC WELDING CABLE**

stable wire speed is maintained and the stability of the welding arc is improved.

(57) Abstract:

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PROBLEM TO BE SOLVED: To maintain a stable wire feeding speed and to improve the stability of welding arcs by spirally winding a metallic wire to form a flexible liner, coarsely winding this wire at one or plural points and densely winding the wire at other points.

SOLUTION: A welding wire 3 delivered from a wire feeder 7 acts to deflect the entire apart of the line 1 in a diametrical direction at the time of passing the liner. The line 1 is densely wound with high rigidity over nearly the entire length thereof and is, therefore, hardly deflected and the specified wire feed speed in a welding arc part 9 of the welding wire 3 is maintained. The welding wire 3 fed at a specified speed receives axial compressive force at the moment of an increase in the time the welding wire is in contact with the part 10 to be welded. At this time, the coarsely wound part A of the weak rigidity of the line 1 slightly is slightly deflected within the spacing between this part and the central pipe 2c, by which the compressive force of the welding wire 3 is absorbed and the feeding at an excess speed in the arc state is prevented. As a result, the

